REMARKS

Claims 1-13 are pending in the present application. The specification of the disclosure was objected to because the terms "919" and "944" in paragraph [0322] referring to Fig. 16-b and Fig. 16-c should be changed to "1919" and "1944," respectively. Claims 1-13 were rejected under 35 U.S.C. §102(e) as being anticipated by Black et al.

Claim 1 has been amended. Reconsideration and reexamination of the application in view of the amendment and following remarks are respectfully requested.

The specification of the disclosure was objected to because the terms "919" and "944" in paragraph [0322] referring to Fig. 16-b and Fig. 16-c should be changed "1919" and "1944" respectively.

The disclosure has been amended to correct "919" and "944" in paragraph [0322], and now reads "1919" and "1944," respectively. Further, the specification has been amended and now includes U.S. Patent Application Number 10/612,753 in the reference to "Method and Apparatus for Switching Fibre Channel Arbitrated Loop Devices" in paragraph [0001] of the specification. The disclosure has also been amended to correct "the port 112" in paragraph [0187] and now reads "through 112 the port." With these amendments, it is respectfully submitted that the objection to the specification has been overcome.

Claims 1-13 were rejected under 35 U.S.C. §102(e) as being anticipated by Black. With the amendment to claim 1, it is respectfully submitted that rejection of claims 1-13 as being anticipated by Black has been overcome.

The present invention as claimed is directed generally to a method and apparatus for device access fairness in Fibre Channel Arbitrated Loop Systems. The claimed invention comprises logic implementing predefined loop control criteria to enforce fairness *for single and multiple Loop Switch systems*. In particular, multiple Loop Switch systems are interconnected by ports that are configured as either a "tree" or "string." (*See* Fig. 16-a, Fig. 16-b). First-come, first-served rotating priority may not be the best solution for system performance. For example, a switch may have a

pending request at a cascade port that collides with a pending request from a port configured as a device. Instead, one embodiment of the claimed invention improves system performance by assigning the highest priority to string cascade ports, second highest priority to tree cascade ports, and lowest priority to device ports. As a result, the present invention improves system performance as compared to a true rotating priority system, such as a "round robin" algorithm. In another embodiment of the present invention, multiple switches interconnected in a "string" cascade architecture are treated as a "virtual" loop of interconnected Loop Switches. Each switch is then treated as a single device on a single arbitrated loop, thereby ensuring each Loop Switch will, in turn, get its chance to communicate. Further, another embodiment of the present invention uses a time out period to address competing ARB requests in a tree of cascade configuration.

Thus, claim 1 has been amended to recite that the logic implementing predefined loop control criteria enforces fairness for *single and multiple Loop Switch systems*. Black fails to disclose, teach, or suggest this limitation.

As understood by the Applicants, Black is silent on ensuring fairness for a system containing a plurality of Loop Switch systems. Instead, Black is only seen to disclose a fairness token that circulates to all ports of a given switch to enable a "round robin" fairness algorithm. (Column 17, lines 29-30). Black therefore only ensures fairness to non-switch devices connected to a single switch, either directly or through a loop containing a plurality of devices. Although the fairness token gives a particular port "high priority status," the fairness token of Black is not seen to ensure fairness for a system comprising of a plurality of interconnected Loop Switches in either a tree or string cascade configuration. (Column 7, lines 35-38). Further, Black may not be the best solution for system performance, as mentioned above, for a port connected to another Loop Switch (as a cascade) with a pending request may collide with a pending request from another port connected to a device.

Therefore, because Black fails to disclose logic for enforcing fairness for single and multiple Loop Switch systems, and instead only discloses a fairness token shared by the ports of a

single Loop Switch, it is respectfully submitted that rejection of claim 1 (and claims 2-13 which depend on claim 1) has been overcome.
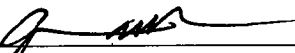
In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If, for any reason, the Examiner finds the application other than in condition for allowance, Applicants request that the Examiner contact the undersigned attorney at the Los Angeles telephone number (213) 892-5752 to discuss any steps necessary to place the application in condition for allowance.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. 491442011622.

Dated: November 2, 2007   Respectfully submitted,

                                             By
                                             Glenn M. Kubota
                                                Registration No.: 44,197
                                             MORRISON & FOERSTER LLP
                                             555 West Fifth Street, Suite 3500
                                             Los Angeles, California 90013
                                             (213) 892-5200

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